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DATE: December 9, 2002

TO: Examiner Chunduru

COMPANY: Patent and Trademark Office

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FROM: Carole Rasmussen on behalf of Heidi S. Nebel

NUMBER OF PAGES (Including cover): 14

COMMENTS:

09/780,762

Please see the attached amendment and Auto-Reply.

Thank you,

Heidi S. Nebel

HSN/cr

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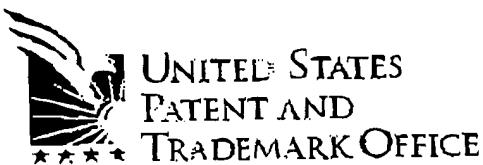
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Page 001

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<p>To: TECHNOLOGY CENTER 1600 Company: Patent and Trademark Office Phone: Fax: 703-872-9308</p> <p>From: Matthew M. Catlett Company: MCKEE, VOORHEES & SEASE Phone: 515-288-3687 Fax: 515-282-6778</p> <p>Date: March 21, 2002 Pages Including this cover page: 13</p> <p>Comments: Amendment attached for:</p> <p>Re: U. S. Serial No. 09/780,762 Filed: February 9, 2001 Title: METHOD FOR AMPLIFYING FULL LENGTH SINGLE STRAND POLYNUCLEOTIDE SEQUENCES Inventor: Connor et al. Our No. P04864US2</p> <p><small>THE DOCUMENTS ACCOMPANYING THIS FACSIMILE TRANSMITTAL COVER SHEET CONTAIN INFORMATION FROM THE LAW FIRM OF MCKEE, VOORHEES & SEASE WHICH MAY BE CONFIDENTIAL AND/OR LEGALLY PRIVILEGED. THE DOCUMENTS ARE INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE ADDRESSEE IDENTIFIED ABOVE. IF YOU ARE NOT THE INTENDED RECIPIENT OR AN AGENT RESPONSIBLE FOR DELIVERING THESE DOCUMENTS TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY REVIEW, DISCLOSURE, COPYING, DISTRIBUTION OR THE TAKING OF ANY ACTION IN RELIANCE ON THE CONTENTS OF THIS TRANSMITTED INFORMATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS FACSIMILE IN ERROR, PLEASE IMMEDIATELY NOTIFY THIS FIRM SO THAT WE CAN ARRANGE FOR THE RETURN OF THE ORIGINAL DOCUMENTS TO US. THANK YOU.</small></p>		

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : CONNOR *et al.*
SERIAL NO : 09/780,762
FILED : February 9, 2001
TITLE : **METHOD FOR AMPLIFYING FULL LENGTH SINGLE STRAND POLYNUCLEOTIDE SEQUENCES**

Grp./A.U. : 1656
Examiner : Chunduru, S.
Conf. No. : 6610
Docket No. : P04864US2

AMENDMENT AND RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

The amendments and remarks below are provided in response to the non-final Office Action dated January 8, 2002 (PTO Paper No. 8).

AMENDMENTIn the Specification

Please replace the paragraph beginning at page 3, line 8, with the following paragraph:

C1
--It is an object of the present invention to provide a method for amplifying cDNA by providing circularized first strand cDNA as template.--

CERTIFICATE OF FACSIMILE TRANSMISSION (37 C.F.R. § 1.6(a)(3))

I hereby certify that this document and the documents referred to as enclosed therein are being transmitted via facsimile to: Technology Center 1600 (Art Unit 1656) 703-872-9306, Attn: Assistant Commissioner for Patents, Washington, D.C. 20231, on this 21st day of March, 2002

Kathy P. Anthofes
Kathy P. Anthofes

Please amend the paragraph beginning at page 10, line 10, as follows:

Once the circular nucleic acid is formed, then a template extension amplification reaction is carried out with gene specific primers. The design of the first and second primers differs from that of traditional PCR of cDNA first in that using a single nucleic acid strand as template. The primers are instead designed so that each one has a 3' end of the primer which is toward either the 5' or 3' end of the polynucleotide. This means that the forward primer will typically be towards the 3' end of the molecule and the reverse primer will be towards the 5' end of the molecule. For example, if a known sequence comprises 5'-ATATATATGCGCGCGC-3' a forward primer would be 5'-CGCGCGCG-3' to hybridize with the 3' end of the molecule and the second or reverse primer would be 5'-ATATATAT-3' to hybridize with the 5' end of the molecule and having its 3' end towards the 5' of the target gene. See Figure 1. Design of primers for amplification and extension reactions are commonly known in the art of PCR amplification and the remainder of primer design is standard. A brief summary of oligonucleotide primer design is disclosed herein. In addition a discussion of primer design can be located in "Molecular biology Techniques Manual" third edition CRC Press, Editors, Coyne et al. In addition, there are a number of publically and commercially available computer programs to aid in design of primers including, BLAST, PrimerGen, Primer (Stanford), Amplify, Primer Design 1.04, PC-Rare, CODEHOP, Primer 3, and Net Primer (Premier Biosoft Int'l).

In the Claims

Please cancel claims 2, 18-20, 24, and 25.

Please amend claims 1, 6, 9-12, 15-17, 26 and 27 as follows:

1. (Amended)

A method for amplifying a cDNA comprising:

C2
sub
D1